

## **REMARKS**

The present Amendment is in response to the Office Action mailed November 18, 2008. Claims 1 is amended, and new claims 15-17 are added. Claims 1-17 are now pending in view of the above amendments. Applicants note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references. Applicants also note that the remarks presented herein have been made merely to clarify the claimed embodiments from elements purported by the Examiner to be taught by the cited reference. Such remarks, or a lack of remarks, are not intended to constitute, and should not be construed as, an acquiescence, on the part of the Applicants: as to the purported teachings or prior art status of the cited references; as to the characterization of the cited references advanced by the Examiner; or as to any other assertions, allegations or characterizations made by the Examiner at any time in this case. Applicants reserve the right to challenge the purported teaching and prior art status of the cited references at any appropriate time. Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks.

### **Examiner's Interview**

Applicants express their appreciation to the Examiner for conducting an interview with Applicant's representative on February 13, 2009. The substance of the interview is included in this response.

### **Amendments to the Specification**

Applicant has amended the abstract as required by the Examiner to remove the title of the invention from the abstract.

### **Rejection Under 35 U.S.C. § 103**

The Office Action rejected claims 1-7 and 9-12 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,802,788 (*Ozawa*) in view of PCT Publication No. WO 01/65023 (*Kollegger*). The Office Action rejected claim 8 under 35 U.S.C. § 103(a) as being unpatentable over *Ozawa* in view of *Kollegger* and further in view of U.S. Patent No. 4,744,691 (*Thal*).

Applicants traverse the rejection for obviousness on the grounds that the references – either individually or in combination – fail to teach or suggest each and every element of the rejected claims.

As discussed during the interview, claim 1 has been amended to clarify that the one or more wedges comprise first and second wedge-shaped layers and that the first wedge-shaped layer has a greatest thickness in the region near the load. With this arrangement, the first wedge-shaped layer can lower the stiffness of the one or more wedges in the region near the load to more evenly distribute contact pressure between the tensile element and the wedges.

Although *Ozawa* discloses a tubular body 5, it does not teach or suggest the first wedge-shaped layer recited in claim 1. First, the tubular body is not wedge-shaped and therefore does not have any type of wedge action. Claim 1 has been amended, in contrast, to clarify the wedge action of the one or more wedges. Specifically, claim 1 recites that the first and second wedge-shaped layers each have a wedge shape to slide along an inclined surface of the anchor body to force the one or more wedges against the at least one pre-tensioned or stressed tensile element. This wedge action of forcing the layers against the tensile element is not taught or suggested by the tubular body 5, which is not wedge shaped and has not been shown to either slide along an inclined surface or force the wedges against the stressed tensile element.

Second, there is no suggestion that the thickness of the tubular member 5 of *Ozawa* is greatest in the region near the load. Rather, the tubular body 5 is fitted between the tensioning member 1 and the wedge. The tubular body 5 is employed as an elastoplastic material. See col. 5, ll's 50-58. However, because the thickness is not greatest in the region near the load, it does not teach or suggest reducing a stiffness of

the one or more wedges near the load to more evenly distribute contact pressure as recited in claim 1.

*Kollegger* does not remedy these deficiencies. As discussed during the interview, *Kollegger* does not show an anchoring member using a wedge effect, as recited in claim 1, that applies lateral pressure to a tensile element. As discussed previously, claim 1 has been amended to clarify the wedge action by reciting that the one or more wedges each have a wedge shape to slide along an inclined surface of the anchor body to force the one or more wedges against the tensile element.

*Kollegger*, as discussed during the interview, does not teach or suggest this type of wedge action. Rather, *Kollegger* relies on a contoured surface. Specifically, *Kollegger* teaches that "[a]nchor sleeve 4 serves as a form for making anchor body 6. Inner wall 44 of anchor sleeve 4 must be made in such a way that, when tension member 2 is under load, anchor body 6 is not pulled out of anchor sleeve 4." See *Kollegger* translation page 13. *Kollegger* further teaches that to "prevent the anchor body from being pulled out of the anchor sleeve, the inner wall of the anchor sleeve is made with a contoured shape." See *Kollegger* translation page 7.

*Kollegger* therefore suggests that the contoured shape prevents anchor body from being pulled out of the anchor sleeve. As a result, the anchor body 6 works contrary to the operation of a wedge. Force transmission in *Kollegger* requires a bonding of the rough surface 45 and the cast material 3 of the anchor body 6.

In addition, claim 1 clarifies that the one or more wedges include first and second wedge shaped layers that reduce the stiffness of the one or more wedges near the load. Because the modulus of elasticity is different between the first and second wedge-shaped layers and because a thickness of the first wedge-shaped layer is greatest in the region near the load, the first and second wedge-shaped layers can lower a stiffness of the one or more wedges in the region near the load.

As discussed previously, the tubular member 5 of *Ozawa* is not wedge shaped and is illustrated as having a constant thickness. In addition, the tubular member is intended to provide an elastoplastic material. This does not teach or suggest, as previously discussed, that the tubular member 5 can reduce stiffness as a region near

the load. More specifically, the tubular member does not provide any wedge action and is not illustrated as having a greatest thickness in the region near the load to reduce a stiffness of the wedge near the load. As a result, these aspects of claim 1, among others are not taught or suggested by *Ozawa*.

As discussed during the interview, this deficiency of *Ozawa* is not remedied by *Kollegger*. As discussed above, the wedge action of claim 1 is not suggested by a reliance in *Kollegger* on a contoured surface to prevent the anchor body from falling out of the anchor sleeve.

Further, although the anchor body 6 has a greater cross sectional area in the load bearing region 41, there is no suggestion of one or more wedges that have first and second layers as recited in claim 1. In other words, the anchor body 6 of *Kollegger* does not teach or suggest layers that have different modulus of elasticity that lower a stiffness of the wedge near the load. Rather, *Kollegger* discloses a greater cross sectional to distribute bond stresses between the tension member and the anchor body. See page 13 of translation. Distributing bond stresses fails to teach or suggest lowering a stiffness of the wedges near the load as recited in claim 1. In fact, *Kollegger* does not disclose an anchorage with a wedge-shaped layer with a lower modulus of elasticity compared to the anchorage and does not disclose lowering a stiffness in the region near the load.

For at least these reasons and as discussed during the interview, Applicants respectfully submit that claim 1 is patentable over the cited art. The dependent claims 2-14 are patentable for at least the same reasons.

As further discussed during the interview, Applicant presents new claims 15-17. New claim 15 recites a first and second wedge shape layers that provide a wedge type action by including an inclined surface to force the first and second wedge shaped layers against the tensile element. For the reasons discussed previously, these aspects of claim 1 are not taught by the cited art.

Claim 15 further recites that a greatest thickness of the first wedge-shaped layer is in the region near the load and that a total thickness of the first and second wedge-shaped layers is smallest in the same region near the load.

As discussed during the interview, *Ozawa* fails to teach both of these elements as a whole. More specifically, the Office Action acknowledges that *Ozawa* does not disclose that a greatest thickness of one of the wedge-shaped layers is in the region near the load.

*Kollegger* teaches away from this aspect of new claim 15 by reciting that the cross sectional area is greater near the load while claim 15 recites that the total thickness of the first and second wedge-shaped layers is smallest in the region near the load. In other words, a total thickness that is smallest in the region near the load is not taught or suggested by an increasing cross sectional area. Because *Kollegger* teaches that the cross sectional area increases near the load, the combination of *Kollegger* and *Ozawa*, as discussed during the interview, fails to teach or suggest claim 15.

For at least these reasons and the reasons discussed herein, Applicants respectfully submit that claims 15-17 are patentable over the cited art.

### **Conclusion**

In view of the foregoing, Applicants believe the claims as amended are in allowable form. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, or which may be overcome by an Examiner's Amendment, the Examiner is requested to contact the undersigned attorney.

Dated February 18, 2009.

Respectfully submitted,

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